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INTRODUCING PROF O AS A NEW SUPERHERO

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Abstract: **Prof O is a new cartoon that introduce a new superhero figure in a form of super intelligent child. The genre of the storyline is a mixture of adventure and action. The aim of Prof O's development is to deliver educational values and awareness of current issues related with children in a form of game and animation. The selected mediums are known as the most popular mediums accessed by children as examples Upin & Ipin, Boboiboy and Ejen Ali. The.purpose of this research is to develop a 2D PC game as the first platform to introduce the characters and storyline. Prof O will cultivate values like friendship, teamwork, leadership, critical thinking, problem solving and love. Adobe Animate CC and Action Script 3.0 are the tools used to build the interactive game. It is hope that Prof O can give high positive impacts towards children in facing the new world today.**

Keywords: 2D game, new superhero, Prof O, cartoon, children, game

1. INTRODUCTION

Two-dimensional game is one of the ways to promote and introduce Prof O as the new Superhero and also to raise awareness about the current issue to people nowadays especially younger generation. Prof O is a new iconic superhero in Malaysia.

The aim of Prof O's development is to deliver educational values and awareness of current issues related with children in a form of game and animation. The selected mediums are known as the most popular mediums accessed by children as examples Upin & Ipin, Boboiboy and Ejen Ali. Prof O is presented as the role model for the children.

It is hope that this game will assist the children in facing the current issues related with children, as example bully and paedophilia cases.

1.1. Awareness of Current Issues in Malaysia

Social media makes it easy for the youth to do bad behavior, such as physical bullying and child abuse. This can affect your child's feelings and future relationships. In severe cases, bullying and abuse have contributed to tragedy, such as mental illness and suicide attempts. The government also plays an important role in this issue. There are a lot of bad things happened to children nowadays, such as kidnapping, organ harvesting, and incest. Lack of public service announcement (PSA) and awareness on these current problems to educate the children make them more vulnerable to the dangers.

1.2. Game-Based Learning

Game Based Learning can be defined as "the use of a computer game-based approach to deliver, support, and enhance teaching, learning, assessment, and evaluation". Game-based learning is used to enhance library instruction, and research across disciplines to support its effectiveness in the classroom. When designed with learning principles in mind, games can increase student motivation, engagement, and learning. Game-based learning offers an exciting opportunity to promote understanding among children. Increased access to the technology allows awareness to be delivered to the children online and offline. Educating children by using games is a new method to make them more engaged and understand. It is hoped that this project will be the movement to save our future generation.

1.3. Play and learning

The game design process can be related to the design of entertainment experiences. Instead of requiring low mental capacity, games should be challenging and entertaining and the goal of the design should be to create meaningful play. One of the main reasons for this is that when people play such games, they are generally found to be very engaged in the game: They are totally immersed in the game and can play for hours on end with little or no awareness of the more general world around them.

1.4. Computer game and children

Games technologies are increasingly seen as fertile ground for the development of resources to support learning. This interest is driven by a number of considerations. First, there is an increasing awareness that young people's digital life outside school are shaped by interaction with games technologies. As they use PC and desktops, the school setting should begin to engage with these tools. Second, these tools are the backbone of learning communities. It is a powerful tool to develop thinking skills for the youngsters. It has been proved that games are capable of enhancing cognitive skills. For example, computer simulations games. According to Connolly (2007),

2. RELATED WORK

This chapter discussed about previous works related to this project.

A. *Research on the awaneress in games of current issue*
(Spring of Summer)

Figure 1: Spring of Summer Gameplay

Spirits of Spring is a game that teaches kids about weathering bullying and learning empathy. Kids play as a Native American boy named Chiwatin, exploring four levels of a magical world filled with streams, trees and animals, and they have to solve puzzles and challenges along the way.
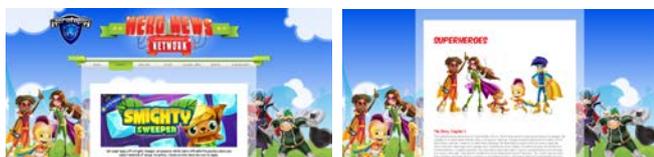
B. *Hero News Network*

Figure 2: Hero News Network

The Bully Bunch passes by Rock's house, hears the music and pelts rotten eggs at his garage door. Suddenly, the house shakes, the electricity goes off and the kids find themselves in complete darkness. Shocked and scared, they watch in silence as light beams pour in through the cracks in the walls. They think it's another trick by the Bully Bunch but not this time. The cosmic rays surround them and they are transported to a mysterious and unfamiliar place - Herotopia Island. It is here that they become superheroes with superpowers.

C. *Detroit: Become Human*

Figure 3: Detroit: Become Human

In the game we see android housekeeper Kara thrust into an uncomfortable domestic abuse situation. She's charged with taking care of a young girl who is attacked by her belt-wielding single father. The game tries to get the point across that you're able to change the course of events at multiple points in the scene.

3. STROYLINE OF GAME

The game has four playable characters, which the player can choose:

i. Prof O - a master mind, super genius and has a range of tools hidden at all levels;

ii. Siva - a child with mix martial arts capabilities which strength will rise at every level;

iii. Chin-chin - a goddess of strategy whom can see things in mathematical equation; and

iv. Sepai – Prof O's pet that act as a spy when the team needs information. Prof O can communicate with Sepai via a gadget created by Prof O.

The villain, Big Boss (Prof Z) will appear every level to make the game difficult for the opponent. This story tells of two good friends, Prof D and Prof Z who have created a powerful CHIP and able to control the world. But Prof Z has been heartbroken to steal CHIP and sell it to people who want a high price. Luckily, Prof. D got up and had escaped from CHIP and hiding. After 10 years passed Prof Z still looking for CHIP. But Prof Z did not realize in 10 years that Professor's son Prof O was very good and wanted to save his father. The game has 5 levels. Each level has an obstacle that every player needs to pass to save Prof. D.

If the player successfully completes each level, the player will get a piece of note containing a puzzle in which the player will collect each puzzle sheet up to the fifth level. Finally, all the pieces of the puzzle will tell the player to find a hiding place for Prof Z and save Prof. D.

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In this game, each player needs to collect a coin because the coin collected by the player can be used after completing each level. Players need to shop to convert new weapons and can add forces and weapons. With this coin as well, players can buy accessories for the in-game character for example, buying clothes.
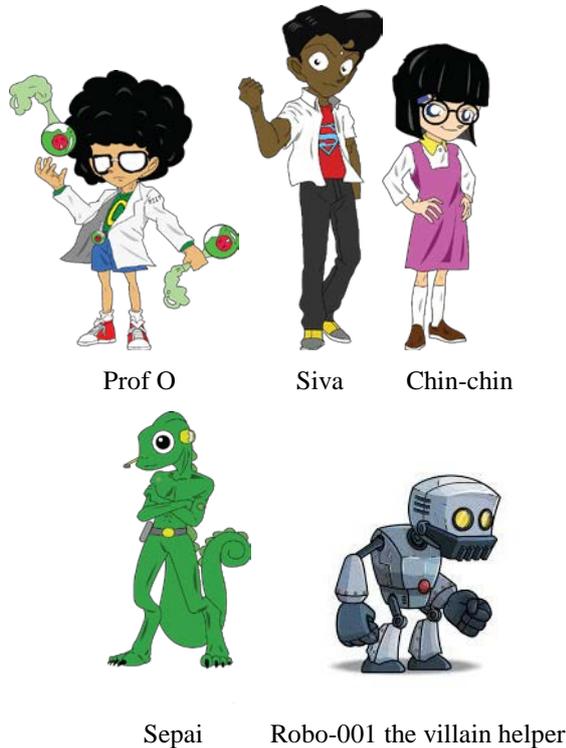

Prof O   Siva   Chin-chin

Sepai   Robo-001 the villain helper

Figure 4: Characters
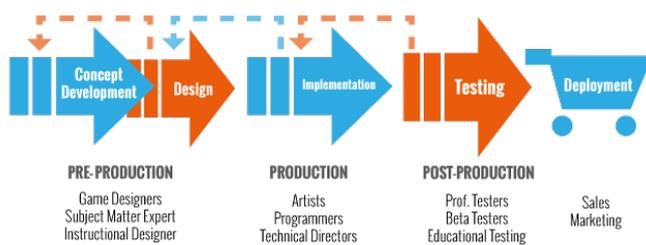
4. METHODOLOGY

Figure 5: AGILE Game Development Methodology

This chapter discussed the research methodology used in this project in developing the Prof O: The Superhero game.

• **Phase 1: Concept Development**

The idea came when the needs to educate children on bad incidents happened everyday involving children. The aim of the game is to deliver awareness on the current crimes happened to children and how to avoid them. The storyline of this game comes through a variety of cartoon animations. Watching action stories and adventures, gives

a lot of inspiration in developing the game. This game can simulate on how the player can escape the problems of bullying or becoming victim of rape.

Technical requirements for the game are generated after a survey has been done among public using questionnaires and interviews.

• **Phase 2: Design**

The theme chosen for this game is an action theme because this game has action like shooting fires and chasing after. Black and dark green are the main colors in the game to give dark effect due to crimes location. Font used are Rising Venus because it is a quadratic, ultra-modern, anomalous style and Raleway is a sans serif elegant family-friendly type.

The atmosphere in this game has 3 levels. First stage in the forest area, both front of the beach and lastly in the lab. After the developer finalize the content of the game, this is the phase where the programming will be developed to interact the game. Based on the data that had been collected, the programming part will integrate on the feedback that had been analyzed.

Figure 6: Game's Screenshots

• **Phase 3: Implementation**
Development of materials and procedures for installing, maintaining, and periodically repairing the instructional program. This is also the phase where the developer will ensure the application is functional.
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• **Phase 4: Testing**
Testing has been carried out at SMK Pandan Jaya. Questionnaires have been distributed to 35 students to provide the feedback on the game.

- **Phase 5: Deployment**
  The game will be further developing for perfection. Therefore, it will not be available in the market until it is ready to be published.

5. RESULT & DISCUSSION

There are many types of the method can be used to test a prototype. When all the design and development has been completed, developer tested the application by using a questionnaire and user also given the chance to use the application that created by the developer. There are two types of testing phase which is Alpha testing and Beta testing.

D. Alpha Testing

Alpha testing is a type of acceptance testing; performed to identify all possible issues/bugs before releasing the product to everyday users or public. Alpha testing performed by user who are usually among the developer organization. Critical issues or fixes can be addressed by developers immediately in Alpha testing. Alpha testing is to ensure the quality of the product before moving to Beta testing.

E. Beta Testing

Beta Testing of a product is performed by "real users" of the software application in a "real environment" and can be considered as a form of external User Acceptance Testing. Beta version of the software is released to a limited number of end-users of the product to obtain feedback on the product quality. Beta testing reduces product failure risks and provides increased quality of the product through customer validation.

Based on the result from Alpha and Beta testing, the developer stated that this project was a success and the objective is achieved successfully. All the information gathered is reliable and useful to the user to create an awareness regarding the current issue (bullying) in Malaysia. Prof O delivers the message to children and teenagers clearly. Total average rating/ Questionnaire elements and Total Average Testing = 3.32.
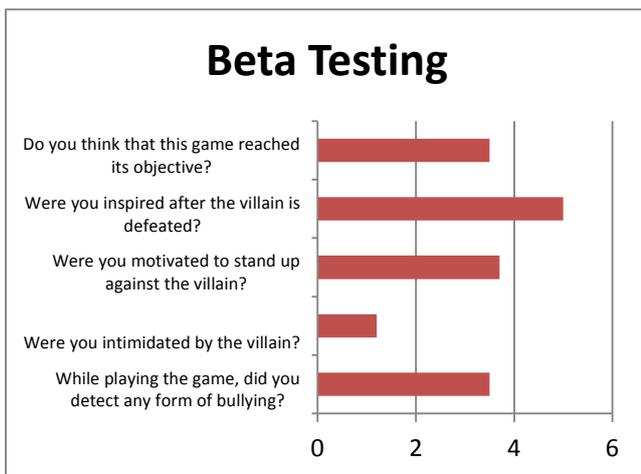
6. RECOMMENDATION AND FUTURE ENHANCEMENT

To make the game more marketable, the number of features such as inventory system, shop, extra stages, bonus rewards and weapon grades need to be added. The inventory system can be used to store item such as weapon, potion and armor. Other than that, at shop or market the developer can use it as a medium to sell items.

Based on the survey that had been done, the result showed that all the users are satisfied with this application and make suggestion to improve the quality of game play by changing the development platform to Unity. This may help in increasing the quantity of potion or power-up items to make the game more interesting. Besides adding weapon grade system, it will give more intense to the user to play this game. This help the user to enjoy this game and experiencing the best Malaysian Superhero of Prof O game in this era. Final words, Prof O has successfully managed to achieve its main objective.

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Table 1: Beta Testing Result